GEELONG NATURALIST

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GEELONG NATURALIST

August 1997

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COMING EVENTS

AUGUST

5	General Meeting		Members' Night	
10	Biodiversity Group Excursion	+	Great Ocean Road	
12	Plant Group Meeting			'Daisy Bush, Sedges, Rushes'
17	Excursion		N'thern Brisbane Ranges	Leaders: Madeline Glynn 5248 6332 Peter Hackett 5229 4642
22	Bird Group Meeting		Rohan Bugg	'Birds of Werribee'
27	Biodiversity Group		Workshop Meeting	

SEPTEMBER

2	General Meeting		Melody Serena	'Ecology & Conservation of The Platypus'
7	Biodiversity Group Excursion	+	Yarto, Batesford	
9	Plant Group Meeting			'Platysace, Wattles, Boronia'
18	Excursion		Werribee- Rivers & Plains	Leader: Rohan Bugg
23	Bird Group Meeting		Gordon McCarthy	'Kingfishers
24	Biodiversity Group		Workshop Meeting	
29	VFNCA Rowsley Workshop			
	Mon - Sun		N'thern Brisbane Ranges	Leon Costermans/ Ken Simpson

* CHANGES TO PROGRAM
\+ ADDITIONS TO PROGRAM

A birdie on the ninth ?
. . . Gordon McCarthy

Sunday 30th June 1997.

Several club members escorted a group of golfers around the Belmont Common Golf Course beginning at 11 a.m.

The weather was rather cold and showery, but didn't dampen enthusiasm. This was the beginning of a move to conduct bird surveys of golf courses.

Club members were impressed by the diversity of habitat on and surrounding the course. The fairways provide open feeding areas among clumps of shrubs and flowering eucalypts and where it runs close to the river, rough, reedy areas, also a number of shallow lagoons.

The birds have become used to human activity, so are easy to approach and observe. The first birds to see were two Grey Butcherbirds, flocks of Yellow-rumped Thornbills and Red-browed Firetails were very approachable as they fed among the grasses.

Two flocks of Yellow-faced Honeyeaters were being harassed by an Australian Hobby (formerly Little Falcon) which was later observed sitting on a dead branch plucking a honeyeater, which we decided was a White-plumed. Here again we were all rewarded by being able to stand underneath, while the unphased Hobby continued to pluck its unlucky prey. Alas no camera!

The walk reinforced our views of the importance of this whole area, as a small ecosystem, including, as it does, the river environs, Jerringot wetlands and the open woodland golf course.

And all close to the city centre

□

Next month . . .

Sept 2. 'Platypus'

Dr Melody Serena, Conservation Biologist with the Australian Platypus Conservancy is responsible for co-ordinating the APC's scientific program. Melody's innovative research on the Platypus and other native species which shares its habitat began in 1989 and since then a research centre has been established at Toorourrong Reservoir Park, Whittlesea.

The APC is a non-profit, non-government organisation conducting surveys in the Melbourne region and at Kangaroo Island and is about to study the effects of salinity on platypus in agricultural areas of the Wimmera.

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EXCURSION NOTICE
. . . Peter Hackett

Northern Brisbane Ranges
Sunday August 17.

We will leave Karingal at 9.00 am sharp and head toward Durdiwarrah to the Barwon Water Reservoir to see drought effected catchment areas where there are a great number of water birds.

We will then move on to Boar Gully camping ground which is off the Mt Wallace-Bacchus Marsh Road. The ranger tells us that we may see Peregrine Falcons in this area so we may linger and have some lunch.

Peter Hackett 5229 4642
Madeline Glynn 5248 6332

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Snipefest

August 26th 10 am till noon
Jerringot Wildlife Reserve.

We want to celebrate the return of Latham's Snipe from Japan to the Belmont Common and are inviting several primary schools to take part. There will be walks, displays and games and a snipe 'Fly Past' when we will choose the best snipe mask or costume.

If you are free to help on that day, please contact :
Valda Dedman (5243 2374)
or Madeline Glynn (5248 6332).

VFNC Campout, October 3,4,5.

Lady Northcote Camp, Rowsley. Cost $80.

Discussion/slide shows Friday and Saturday evenings.
Various excursions/surveys Saturday and Sunday eg. Pyrites Range, White Elephant, Long Forest, northern Brisbane Ranges.

Contact Barry Lingham for further information. 5255 4291.

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Help a friend . . .

If a member friend has not received the 'Geelong Naturalist', they may not have paid their subscription.

Ornithological post . . .

You must have noticed the splendid stamp set which Australia Post has produced. It features waterbirds and includes the Jacana, Little Kingfisher, Brolga and Jabiru.

If you buy a book, there is a great close-up of the Jacana on the cover.

Why not use the stimulus of these beautiful stamps to write that overdue letter to a friend or family ?

□

AUGUST
. . . with Joe Hubbard

'Chuck', a Bleater on a Wetland; Dolphins; Gannets; Twin-leaves and Spinach; And Also:

'Chuck!'
'That's a Bleater!' 'No, it's a Longbill!'
Bleater or Longbill - it doesn't matter. They are returning to Jerringot in August - you know - those Latham's Snipe.

Who will be first to report seeing one? We'll let you know the results in next month's Naturalist.

- Latham's Snipe favour shallow freshwater wetlands with some cover.
- 69% of this type of wetland has been destroyed.
- Not many left.
- **Our** Jerringot wetland is one of these.

Dolphins and Gannets:
I do not know whether Nola Haines acted on this column's advice to take thermos etc to a vantage point and watch, but if she did she got more than her money's worth.

On July 8th at 4.45 p.m. she found something special in her winter seascope.....two dolphins disporting themselves off Drumcondra, Geelong, as only dolphins can do.

Nola was attracted by some unusual silvery water (their wake?) before noticing their fins. She had a good view of them for some minutes until they were disturbed by a motor boat. They submerged to reappear about 100 metres further on until they passed out of sight at Rippleside.

Nola's last sighting of a dolphin (one) in this area was in 1990 I asked her about gannets and yes, she sees them regularly off Drumcondra, probably more in winter and during periods of bad weather.

These are quite large birds, looking freshly white against the sea, with black-edged wings and yellow head. A flock of these feeding is a spectacular sight - effortlessly gliding they suddenly drop straight into the sea with a small explosion of white spray, to emerge seconds later to repeat the process.

Checking back through records I noted a sighting of many Australasian Gannets off St. Leonards on 24/7/96 by Ade Foster. That would have been something to see.

I have watched 50 or more fishing just off shore from Eastern Beach on a pretty dirty day. My other sightings are intermittent and few in June, July.

Next time you go down to the sea, who knows what you might find.

Twin-leaves and Spinach:
Last month while having a look around Lake Victoria (near Queenscliff) I found a Coast Twin-leaf *Zygophyllum billardiera* just starting to flower. This succulent, scrambling plant has dark yellow four petalled flowers. Look for the distinctive pair (opposite) of leaves spreading from the top of the leafstalk. The scientific name *Zygophyllum* means.....yes - you're right.

I was first introduced to this plant by the Plant Group people after they had made a botanical survey of the Belmont escarpment, a limestone outcrop which is home to a rare (for this area) limestone plant community. Other plants recorded were Blue Fan-flower which is coastal, Smooth Rice-flower, Slender Bush-pea only recorded in this area at Anglesea, Boobialla and Running Postman. This makes this escarpment rather special, doesn't it.

If you don't find a twin-leaf you are sure to notice the Bower Spinach *Tetragonia imiplexicona,* crawling around and over plants in the coastal scrubs. This succulent has small, pale, starry yellow flowers which are followed by reddish berries ripening to black.

Its young shoots and leaves were cooked and eaten by the aborigines and the later invaders of this country. Another close relative, the New Zealand Spinach was also eaten.

And Also:
Scented Sundews - lovely white five petalled flowers, ground hugging.
Early Nancy - fragrant, white flowers
Golden Weather-glass, Yellow Stars - *Hypoxis species* - bright yellow to pointed flowers. One is hairy.
Greenhoods - Nodding and Blunt. The flower of Blunt stands up and looks as though a bit of it has been snipped off.
Wattles - Spreading, Myrtle, Blackwood, Golden, Coastal.
Reedwarblers - Clamorous.
Magpies - nest building and putting off intruders.

Watch the passage of a raptor across open country.
Nest-building activities - Red-wattle Birds, Little Ravens, New Holland Honeyeaters and bird calls.
Painted Lady Butterflies.

□

The answer to Joe's plea . . .

In the June issue, Joe asked whether someone "could remind us of the better ways to set up native feeders and the correct foods to use".

Zöe Wilson, manager of Bird Observers Club of Victoria and editor of 'The Bird Observer', responds with a comprehensive article which has been printed for your convenience as a lift-out on pages 7-8

We thank Zöe for her time.

BIRD GROUP REPORT
. . . Barry Lingham

July 22nd 1997

Lawrie Conole was a member of the GFNC as a junior club member. Over the years, he has spoken to the club on many occasions. The topic of this talk to the Bird Group was "Birds of Java".

Java is part of the Indonesian archipelago located on the large tectonic plate attached to South-east Asia. The Australasian plate is slowly pushing northwards, creating the string of islands forming this part of Indonesia.

The edge of the plate is basically the position of the boundary allocated by Alfred Wallace between the Oriental and Australasian faunal regions. Bali is part of the oriental region, but the island of Lombok, which is only some 20km west of Bali, is considered part of the Australasian faunal region. Western Java has similar fauna to Sumatra and Borneo.

Lawrie arrived in Jakarta around Christmas in 1996. Around the city area he noted Long-tailed Shrike, White-breasted Woodswallows and both Yellow-vented and Grey-cheeked Bulbuls.

The island of Java has many volcanoes, some of which are still active. Most of the flat land has been utilised for growing rice or coconut palms, but the steep sides of the volcanic areas usually remain forested and it was in these places that most bird species were seen.

Many of the locals were keen on birds, but mostly as cage pets. There is a steadily growing band of bird observers who are also trying to help protect the avifauna from destructive practices such as capture for the cage trade.

Lawrie is also an avid bat fancier, so he took the opportunity to visit limestone caves on the south coast where more than 2 million Wrinkle-lipped bats roost during the day before setting out to forage in the late afternoon. His slide of clouds of bats moving across the sky was very startling.

Birds noted near this area included several species of Tailorbird and Flowerpeckers.

On Western Java, close to the site of the Krakatoa eruption, several species of Sunbirds were seen including the White-flanked, Ruby-cheeked and the Olive-backed which is also found in Australia. The different species tended to occupy habitat at various altitudes so that the type of sunbird seen changed as the observer ascended a mountain.

The snipe are on their way . . . Valda Dedman brings us the latest news on page 8 of this issue.

A large number of swifts and swiftlet species are commonly found in Indonesia and they are very difficult to identify. Lawrie noted the Glossy Swiftlet, Asian Palm Swift and House Swift. Some of the nests of the swiftlets are used in certain of the local culinary delights.

The Spider-Hunter used its long thin beak to extract spiders from crevices. It resembled a honeyeater.

Many drongo species are found in this region. The Lesser Racquet-tailed, Ashy and Black were seen by Lawrie.

Some of the raptors included the Black Eagle, Javan Hawk-Eagle, Spotted Kestrel and Crested Serpent-Eagle.

The Chestnut-backed Scimitar Babbler and Wren Babblers are only distantly related to the Australian Babblers. The various Flycatchers (Grey-headed Canary, Blue, Snowy-browed, Asian Brown, Little Pied etc) are more closely related to our robins than our flycatchers.

Thrush species were brightly coloured in general - they included the Siberian, Orange-headed, Chestnut-crowned and Grey-headed.

The Rhinocerous Hornbill is a very striking bird with its massive bill . These birds can be up to two metres in length.

Minivets are related to the cuckoo-shrikes. These bright red birds leap-frog across the tree tops foraging for insects.

Barbets are related to the kingfishers. Coppersmith, Brown-throated and Blue-eared Barbets were noted by Lawrie.

Many other birds were discussed during Lawrie's wide ranging talk. He also gave us some insight into the culture of the Javan people and some memorable images of the amazing scenery and architecture. We are now much better educated about the avian variety of our near neighbours - thank you Lawrie!

Next Month's Speaker:
Our own Rohan Bugg will speak on "Birds of Werribee and nearby".

□

A PIT-FALL TRAP FOR INVERTEBRATE CAPTURE

By Dave King

8 Traum Street, Portarlington, 3223.

Introduction

One of the most effective ways of collecting invertebrates during fauna surveys is by the use of pit-fall traps. The trap described here-in was designed by the writer as an inexpensive and easily made item, at the same time very effective in overcoming a number of inherent problems.

Problems associated with pit-fall traps intended for invertebrates are :-

a). Catching non-target species, such as frogs.
b). Rain water getting in and diluting the preservative.
c). Litter in the form of leaves, twigs, etc. dropping or blowing in.
d). Evaporation of the preservative.

To overcome the above problems the trap has a wire mesh screen around the pit-fall container, a cover to prevent rain water and debris falling in. The preservative used is ordinary motor vehicle anti-freeze, being non-evaporative, reasonably cheap and readily available. This anti-freeze fluid is of the order 95% pure ethylene glycol plus additives of corrosion inhibitors, colour dyes etc., none of which, in the writer's experience, adversely effect the collected material.

Materials & Construction

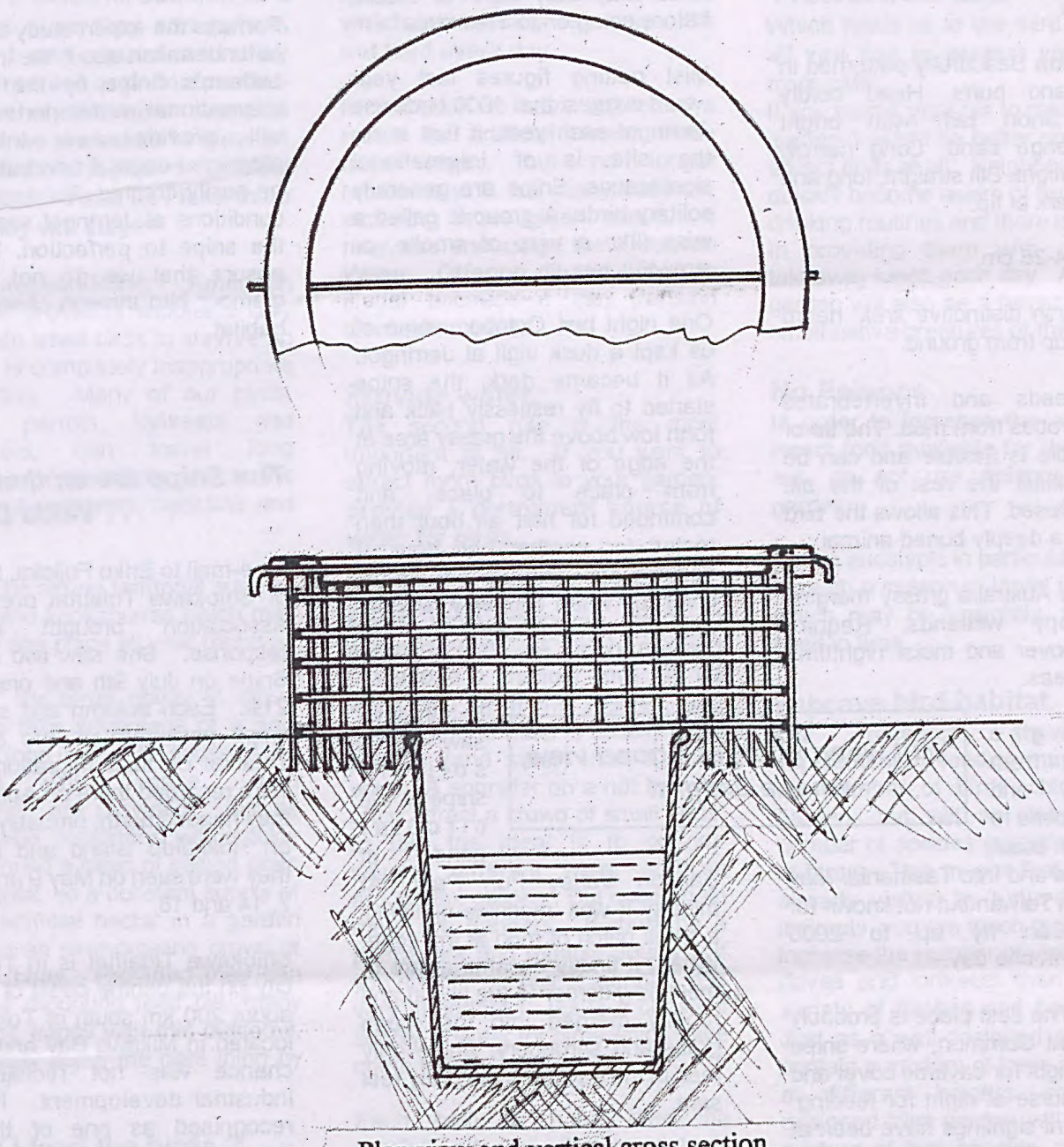
The lid or cover consists of the lid from a standard plastic margarine container. Wire mesh, of 1cm mesh, readily obtainable from most hardware stores, is cut into strips about 30mm wide and length sufficient to form a cylinder that will fit into the groove around the lid perimeter. For the average margarine container this will be about 360mm. When cutting this strip, the top edge is cut to allow a wire strand as the rim, the opposite edge is cut allowing the ends of the vertical wires to be free, shown in the diagram. The lid is secured to the mesh cylinder by passing a length of wire through the rim of the lid , bending each end to retain it. Make certain the securing wire passes under the top wire of the mesh. Holes for this wire can be made using a heated wire.

A normal plastic disposable coffee cup is used for the container, buried flush with the soil surface. A second cup can be used as a permanent and stable hole in which to place the trapping cup. This makes it much easier to replace the cup after emptying and recharging.

Operation

Placement of these traps is probably best in situations where ground vegetation is minimal or relatively bare. Camouflage with other vegetation is generally advisable to reduce adverse aesthetic values and inquisitive public. Traps can be left unattended for a week or more without deleterious effects upon any specimens captured.

Recovery of specimens is performed by straining the contents through a kitchen plastic sieve with fine mesh. The resultant collection is then carefully washed in water, to remove the glycol, then transferred to a shallow dish containing a 70% solution of alcohol for sorting of the specimens. Finally, transfer to a fresh 70% alcohol solution before further processing.



Plan view and vertical cross section of the pit-fall trap.

BIRD OF THE MONTH
. . . Valda Dedman

Latham's Snipe

Name Latham's Snipe *Gallinago hardwickii*

Description Beautifully patterned in browns and buffs. Head boldly striped. Short tail, with bright rufous/orange band. Long narrow wings for flight. Bill straight, long and narrow, dark at tip.

Length 24-26 cm.

Voice Harsh distinctive *krek*, heard as it flies up from ground.

Food Seeds and invertebrates which it probes from mud. The tip of its mandible is flexible and can be opened whilst the rest of the bill remains closed. This allows the bird to feel for a deeply buried animal.

Habitat In Australia grassy margins of swampy wetlands. Require daytime cover and moist nighttime. feeding areas.

Range Migratory, from Japan and eastern Siberia to the eastern coast of Australia and into Tasmania. May stopover in Taiwan but not known for certain. Can fly up to 2000 kilometres in one day.

"But when you get a good view, what a delight! "

Geelong The best place is probably the Belmont Common, where snipe have Jerringot for daytime cover and the golf course at night for feeding. Other recent sightings have been at Collendina and Lake Lorne. Used to be shot at Fyans' Swamp (now Balyang Sanctuary)

Nest In Japan and far eastern Siberia. Four brown blotched pointed eggs laid on ground.

Other Local Related Species None. (The Painted Snipe belongs to a different genus.)

Latham's Snipe is said to return to Geelong with the August full moon, so this year we expect it on 18 August. It usually comes back in ones and twos, and numbers may build up at Jerringot up to over 100 by October. It is believed to be most unusual to see such congregations in Australia. The birds may stay here to moult, before going on to Tasmania.

Mist netting figures last year would suggest that 1000 birds use Jerringot each year. If that is so, the site is of international significance. Snipe are generally solitary birds. A group is called a *wisp* (like a wisp of smoke, or straw).

One night last October, some of us kept a dusk vigil at Jerringot. As it became dark, the snipe started to fly restlessly back and forth low above the grassy area at the edge of the water, moving from place to place, and continued for half an hour then rested for another half hour. It became dark and we had almost given up when suddenly, several rose and flew off to the east and southeast.

In January I saw a solitary snipe at the circular pond at Barwon Valley Fun Park. At midday it was 'machine-needling' a small patch of mud at the edge. When it finally became aware of me it flew across to the island and rapidly merged into the rough grass and shrubbery. Snipe only feed in the daytime when they feel safe.

Dave King took some of the mud to see what the snipe may have been eating. He found various invertebrate larvae (see *Geelong Naturalist* May 1997).

When the temperature reached more than 35 degrees I found snipe resting in long grass under the shade of shrubs.

A display flight has also been recorded from Belmont Common (see *Geelong Naturalist* Feb 1997).

Latham's Snipe has become one of my favourite birds. Once a game bird, it is now fully protected. It was the first species studied under the Japan Australia Migratory Birds Agreement (JAMBA). There is still a tremendous amount to be learned about its behaviour and movements, especially in Australia.

Perhaps the expert study that has to be undertaken about the impacts on Latham's Snipe by the proposed international watersports complex will provide new information, although I doubt if new habitat could be easily created. For some reason conditions at Jerringot seem to suit the snipe to perfection. We must ensure that we do not lose our glamour bird through changes to its habitat.

□

The Snipe are on their way
. . . Valda Dedman

An e-mail to Eriko Fujioka, Secretary of Shiokawa Tidalflat preservation Association brought a swift response. She saw two Latham's Snipe on July 9th and one on July 21st. Each autumn and spring the snipe pass through the Shiokawa Tidalflat on their migration. Snipe were recorded there on April 20th as they headed north, probably to breed on Hokkaido Island and last year they were seen on May 9 and August 7, 14 and 18.

Shiokawa Tidalflat is in Toyohashi city on the central coast of Honshu, about 200 km south of Tokyo. It is located in Mikawa Bay and by pure chance was not reclaimed for industrial development. It is now recognised as one of the most important wader sites in Japan, with 250 species recorded in the area. The Tidalflat, of some 280 ha, is surrounded by wet rice fields, dry cabbage fields, ponds and marshes. more than 50,000 wildfowl and 3,000 waders overwinter there.

The association has conducted bird counts monthly since 1974. It hopes to register the Tidalflat as a RAMSAR site.

□

ATTRACTING BIRDS TO YOUR GARDEN

Reprinted from 'The Bird Observer'
by kind permission of the editor Zöe Wilson.

Bird Observers Club of Victoria, 183 Springvale Road, Nunawading, 3131

Birds are a welcome addition to a garden because they add colour, movement and sound and they provide interest and companionship. One of the most common questions we are asked is 'How do I attract birds to my garden?" And the second is "What do I feed them so that they will stay?"

The European/North American tradition of providing supplementary food to help small birds to survive an icy winter is completely inappropriate for Australia. Many of our birds, including parrots, lorikeets and honeyeaters, can travel long distances in response to rain, or the flowering of eucalypts, banksias and heaths.

It is only the strong territorial such as magpies and kookaburras which may remain in one place all year round.

However, the birds' ability to move quickly to take advantage of a new source of food is also the cause of the problems which arise when supplements are provided. Just as corellas and cockatoos will quickly gather around a heap of spilled grain in a paddock, so a constant supply of seed or artificial nectar in a garden will attract an ever-growing crowd of the local birds. Provided they can afford the mounting feed bill, many people are happy with this outcome. But are they doing the right thing by the birds?

Should I feed the birds ?

Taken to excess, a constant supply of 'artificial' food makes the birds fat and lazy. They sit around waiting for the handouts (making an easy target for local hawks and others), and may suffer from dietary problems which affect their health and their breeding potential. They also quickly pass on their bad feeding habits to their offspring. So the first rule is:
Never allow birds to become dependant on you for food. If you give supplementary food such as seeds, meat, breadcrumbs or nectar, provide small amounts which are quickly eaten up. Do not feed every day.

In the past we have published a recipe for artificial nectar made from sugar, but no longer recommend it for many reasons, including those given above. It may also encourage the European Wasp. Offering diluted honey is illegal because it can transmit diseases to bees.

Provide water.

The second rule is the most important of all. If you want to attract more birds to your garden: **provide a permanent source of water for birds.**

Our research shows that this is the single most important factor in attracting birds. A slowly dripping tap above a shallow bowl will be welcomed by many species, and above-ground water is usually more popular (and safer) than a deep pond. A sprinkler on a hot day will often attract a crowd of small birds. In fact the ideal is to provide several different water sources around the garden. But once again there are dangers. It must be a permanent and reliable source. If you are going away in summer, it is very important to leave a constant supply of water for birds which have come to rely on it.

Each bath or pond must be carefully sited to allow small birds to dive quickly into nearby cover. An overhanging branch gives both shade and protection and thick bushes near a birdbath allow birds to approach the water safely.

Protect from cats

Which leads us to the third rule: **Do all you can to protect your birds from cats.**
If you permit your cat to roam in your garden it would be better not to try to attract birds at all. Neighbouring cats quickly become aware of feeding and drinking routines and there is no point in providing them with a quick takeaway lunch each day. A cat-free garden will also be a haven for other small native creatures of the area.

No Poisons

In order to increase the amount of insect food available for the birds to eat, do not use poisons in your garden.

Young eucalypts in particular often go through a season of larval infestation which may be unsightly, but cures itself in time.

Improve bird habitat.

Our research shows that supplementary feeding may increase the number of birds which visit a garden, but will not increase the number of species (or different kinds of birds). This means that if you are already visited by turtle-doves and lorikeets, you are much more likely to increase the number of visiting turtle-doves and lorikeets than to add a variety of finches and honeyeaters. Just as a well-designed garden will contain a mixture of trees and shrubs at different heights, so a well-designed bird garden will contain a mixture of bird species, making full use of all the different plants and the variety of foods they provide.

If you rely on supplementary feeding to attract birds, you are preventing other birds from making full use of your garden, because the territorial bullyboys such as mynahs, sparrows, wattlebirds and currawongs will take over the feed tray and drive the others away. So the fourth rule is:
improved bird habitat, not increased feeding, will attract more bird species to your garden.

Creating bird habitat

The garden with the most potential to attract a variety of birds is one which contains the greatest variety of plants and plant-forms. A large acreage is not so important.

Mature indigenous trees

Gardens which contain, or are in close proximity to, several tall eucalypts (or the dominant indigenous tree, shrub or palm species in the area), can provide insects, nectar, seed, nest-sites and night-roosts. The retention of mature flowering eucalypts, casuarinas, banksias, etc. is very important. Find out (if you can) which trees grew in your area before settlement, and try to plant at least one in your garden.

Habitat diversity

The greatest diversity of species naturally occurs where two or more kinds of habitat overlap - where grassland meets woodland, for example, or trees reach down to the edge of a lake. Gardens are ideal places to create this diversity on a small scale, as long as you include a mixture of the three main elements: tall tree cover, bushy understorey, and low ground cover or grassland.

Nectar, insects, seed and shelter

As for the question of native or introduced plants; our research found that as long as the tall trees were appropriate to the region, a mixture of native and introduced plants below them could attract as many resident bird species as a totally native garden. However, plants should be chosen with the needs of native birds in mind.

A thick understorey layer of ferns, tall grasses or shrubs from ground-level up to two metres, gives security to small birds such as thornbills, robins, scrubwrens and fairy-wrens as they move around your garden. Nearby areas of open grass or ground-cover can then be used with confidence. Try to include some prickly shrubs for safe nesting.

Plant List

The following selection is a list of plants, both introduced and native, which have been proven to provide insects, nectar, seeds, or all three, for our native birds.

Please be careful. Some plants, although attractive to native birds, can become feral weeds in nearby parkland. This applies to some native Australian plants outside their natural region as well as introduced plants from overseas, so if you are uncertain please check with your local authority before making a final choice.

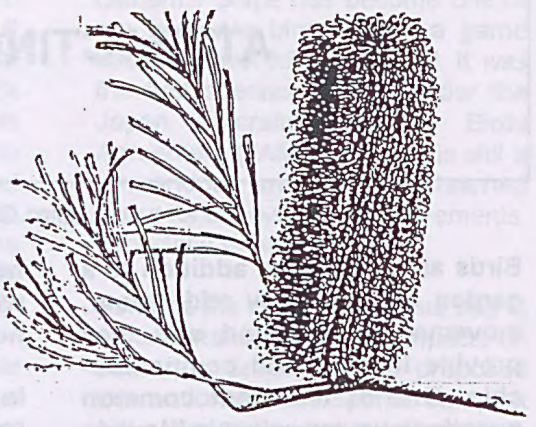
Multi-purpose plants

These may well provide the backbone of your bird-attracting garden.

Acacia
dealbata, floribunda, mearnsii, melanoxylon, retinodes
Banksia
ericifolia, integrifolia, marginata, robur, serrata, spinulosa
Branchysema lanceolatum
Callistemon (all)
Eucalyptus (choose those native to your region)
Grevillea
alpina, banksii, robusta, rosmarinifolia, Honey Gem, Misty Pink, Ned Kelly, Pink Surprise, Poorinda Constance, Robyn Gordon, Sandra Gordon, White Wings
Hakea laurina, sericea
Hymenosporum flavum
Leptospermum
juniperum, laevigatum
Melaleuca
armillaris, hypericifolia, nesophila, quinquenerva, stypheliodes
Syzygium
Tristania

Native plants hosting insects on which birds feed.

(This is only a selection)
Acacia
baileyana, fimbriata, longifolia, polalyriifolia, verticillata
Agonis flexuosa
Angophora costata
Brachychiton
Bursaria
Ceratopetalum gummiferum
Chamelaucium uncinatum
Correa bauerlinii, decumbens, pulchella
Hardenbergia
Melaleuca (all)
Melia azedarach
Metrosideros queenslandica
Oreocallis wickhamii
Pimelea ferruginea
Pittosporum
Prostanthera
Tristania
Wahlenbergia
Washingtonia



Plants visited for nectar or flowers

**Abelia*
**Abutilon*
Albizia lophanta
Anigozanthus (Kangaroo paw)
**Berberis darwinii*
Billardiera longiflora
**Buddleia*
Calothamnus
**Camellia*
**Chaenomeles* (Japonica)
Correa
Epacris
Eremophila
**Feijoa*
**Fuchsia*
Grevillea
**Hedychium* (False Ginger)
Kennedia
**Kniphofia*
Lambertia formosa
**Leonotis* (Lion's Ear)
**Lonicera*
**Melianthus major*
Mistletoe
Pandorea
**Penstemon*
**Protea*
**Rosmarinus*
**Salvia*
**Streptosolen jamesonii*
**Tecomaria capensis*
**Virgilia*
**Weigela*
Xanthorrhoea

Plants which provide seed

(many also from the other lists)
Acacia (wattle)
**Acer* (maple)
**Betula* (birch)
Casuarina
**Cupressus*
**Liquidambar*
*Milk thistle
Pelargonium australe
**Pinus*
Poa annua
Restio tetraphyllus
**Thuja*
Typha angustifolia (Bullrush)

* these are introduced plants. □

LIBRARY NOTES
. . . Betty Moore

A new Coast Action group has begun - Friends of Edwards Point Reserve. Its newsletter tells of a seminar series by Coast Action being held in the supper room at Geelong West Town Hall. Also there are descriptions and drawings of two plants commonly found amongst coastal vegetation, Searocket *cakile species* and Bower Spinach *tetragonia implexicoma*.

Victoria's Rainforests
Perspectives on definition, classification and management put out by Monash Publications in geography and edited by Peter Gel and David Mercer. It covers the proceedings of the Victorian Rainforest Symposium held at the State Museum of Victoria in November 1991, and gives wide coverage of all aspects of rainforest to be found in Victoria, and the definitive criteria by which they may be differentiated.

Outdoors Winter 1997 (NR&E)
'The photographer who loves nature' Ian McCann has spent a lifetime observing and photographing birds, plants, reptiles and mammals. At 82 years he still takes every opportunity to get out into the bush. The McCann collection of approximately 2200 original transparencies taken from the early 1960's to the 1990's, now held by Parks Victoria, is one of Victoria's most important natural history assets.

Other articles cover Healesville Sanctuary, giant earthworms, Altona's own butterfly and coastal heathland burning, to name only a few.

Habitat June 1997 (ACF)
'The Kimberley at the Crossroads' by Tim Fisher and others, analyses problems and suggests ways in which a balance can be achieved in this, one of Australia's last great natural regions between development and conservation and the competing interests of aboriginal and non-aboriginal people.

Wingspan June 1997 (Birds Australia)
'Murray Mallee Reserve'. Birds Australia has purchased Gluepot Station, a South Australian property of 51,300 ha. Six globally threatened birds have been found on the property. (Black-eared Miner, Malleefowl, Red-lored Whistlers, Scarlet-chested Parrots, Striated Grasswrens and non-breeding Regent Parrots). Total cost is $350,000 and a fund-raising appeal has been launched.

'Where to watch birds' by Daryl Kirkup - Mt. Moffatt is situated in central Queensland's Carnarvon National Park. Daryl describes open woodlands broken by spectacular limestone formations and breath-taking views from the Great Dividing Range, its aboriginal history, vegetation, bird life and archaeological sites and tells you how to get there. There are four camping grounds with basic facilities.

'Nesting...where conservation begins' by Stephen Ambrose. An interesting article on Birds Australia's longest running volunteer-based project, the Nest Record Scheme.

Australia Nature Winter 1997
Fascinating articles on insect vision, numbats, dugongs, avian perspective on the politics of parenting and Nature Strips, a collection of eye-catching headed short articles about everything and anything. Did you know that in Borneo there is a carnivorous pitcher-plant that has a mutually rewarding association with ants? The ants enter the pitcher, actually swimming in the fluid and removes discarded bits of prey which would otherwise rot and eventually kill the plant.

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PLANT GROUP MEETING
. . . Joe Hubbard

August 12th.
Daisy Bush, Sedges and Rushes.
Please bring appropriate references and study material.

Excursion report (botanical) Timboon bushland.

□

PLANT GROUP REPORT
. . . Joe Hubbard

The gully is a dense forest of myrtle beech, blackwood and tree ferns with an understorey of low ferns and mosses.

This pen-sketch would fit most of the remaining gullies in the temperate rainforests of the Otways.

Many of the 40+ species of ferns of the Otways would be found in such a gully.

These sheltered, moist, humid gullies provide the ideal conditions for fern growth, from gully floor to tree trunks and branches.

At the July meeting, the more knowledgeable members introduced the rest of us to the magic of ferns. They were ably supported by Leila Ramsay with her impressive collection of mounted fern specimens.

By evening's end we were more conversant with tree ferns, ground ferns, epiphytic ferns and filmy ferns.

Some of us will now be able to identify a Bats-wing Fern, a Mother Shield-fern, a Gipsy Fern or a Spreading-fan Fern.

And be able to distinguish between Rough, Slender and Soft Tree Ferns.

Now a quick rewind to July's Plant Group Report. The last sentence should have read "especially during the flowering of the ironbarks **and** in springtime." Ironbarks are winter flowering.

And while on the box/ironbark forests. A recent report from the World Wide Fund for Nature gave Victoria a poor rating on conservation issues. One area of concern was the box/ironbark forests - still under threat from mining and timber harvesting.

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BIO-DIVERSITY NOTES
. . . Ade Foster

Apologies for the absence of notes in last month's Naturalist. I must be getting old!

June Meeting: Fungus.

Although most of us have observed that it was not a good year for fungus, a surprisingly wide range of the local species was to be found on the specimen table. An interesting (and frustrating) evening was spent poring over the field guides and keys trying to identify several of the more interesting ones.

Les bought along a beautiful specimen of one of the more unusual local fungus, the Vegetable Caterpillar or *Cordyceps*. Naturalists from very early times were familiar with these strange almost club-like fungus which appeared to sprout from the dead and mummified body of a caterpillar, Theories such as witchcraft and alchemy were often touted. Father Torrubia of Cuba wrote a detailed account in 1750 but it was not until the early 1800's that any real understanding of the relationship between the fungus and its victims was known.

Cordyceps are represented by about 140 species worldwide, some twelve of which can be found in Victoria. They have a fascinating life history. It is thought that the spores are ingested by the caterpillars and grubs of certain insects, notably those of the Swift Moths, *Hepialidae*, or may be absorbed through the skin. The fungus then spreads rapidly until the larvae's whole body is riddled with fungal hyphae, whereupon it dies. Occasionally an insect will reach the pupal or even adult stage before the fungus reveals itself. Deprived of further source of food by the death of its host, the fungus produces its fruiting body, usually a small, simple club-like structure. These can be quite extravagant in some species, branching repeatedly like the antlers of a deer, and reaching up to 30 cm. in height! Spores are released from this body, often as long snowy white threads making the club look a little like fairy-floss.

Our specimen was probably *C gunnii*, which is usually associated with caterpillars of *Oxycanus*. A very common Victorian species, *C. gunnii* is not often seen, due to the cryptic nature of the fruiting body.

July Meeting Show'n'Tell

The July meeting attendance was well down with many of our regulars unable to attend. Frank Scheelings brought along some slides of orchids which he has taken recently, and while we had seen many of them before, we were not always certain as to their identity. Perhaps some-one more persuasive than I could convince Frank to bring them along to a club Member's Night when many more knowledgeable are present.

Dennis Greenwell and I have been engaged in Water Watch with Barwon Water for a couple of years now, regularly testing the water at Jerringot and reporting our findings. One of the tasks requires us to do what is called a macro-invertebrate study, a check of the beetles, bugs, worms and the like which inhabit the swamps, often a very good guide to the quality of the water.

Since Jerringot dried out at the end of 1997 we have not done an invertebrate study so we took the opportunity of bringing samples along, and having the group's members aid us in our endeavours to count and identify as many species as possible.

Frank also had an amazing insect collected at our July excursion. At first glance it bore resemblance to certain of the harlequin type bugs, but it had on its hind legs great brushes of black hairs reminding me not a little of the cowboy's chaps worn by the baddies in the Westerns of my youth. While I could find little written about this strange fellow I can say that it is an Assassin Bug, *Reduviidae*, of the Sub-family *Holoptilinae*, and Genus *Ptilocnemus*, Described in Insects Of Australia as having "conspicuously plumose hind tibeae." I like chaps better!

August Meeting Our topic will be Mosses. Lichens and Liverworts. Come along on Tuesday 27th August and bring your specimens with you.

June Excursion Ironbark Gully.

A delightful walk through a surprisingly dry Ironbark Gully was highlighted by several interesting bird sightings, not the usual fare of the Bio-diversity group.

Red Wattlebirds were around in very large numbers, and as the ironbarks were in flower, were very vocal indeed. The noise created by these birds was quite remarkable, as was the sudden deafening silence as a Whistling Kite appeared overhead.

A large flock of sixty plus White - naped Honeyeaters was seen several times as they flew quickly from cover to cover, never allowing us a good sighting, but loudly announcing their presence by uttering their rather peevish whistling cry.

A pair of Scarlet Robins hopped around the car-park while we had a much needed cuppa, allowing a delightful view of this beautiful little bird.

July Excursion
Bannockburn Bush

We met at 9.00 am in thick fog and drove with some reservations towards Bannockburn. We turned off the Ballarat Road and into brilliant sunshine which was to stay with us throughout a most interesting day. We took the opportunity to have a look over the land which has been purchased by Barwon Water as the proposed sight for a sewage treatment plant for the Bannockburn area. There are some beautiful, old Yellow Gums, well worthy of preservation and a lot of prickly wattle, but otherwise the vegetation is a little disappointing.

The Bio-diversity, however, was quite another story. Joe Hubbard found a Cordyceps, (no such thing as coincidence) and while Frank was attempting to photograph it, we discovered seven or eight more within a distance of a metre! Several very curious beetles, bugs and mites were discovered under the bark of a very old Yellow Gum, and the bird life was prolific.

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Yellow robins, by far the most common birds in the area, were seen and heard everywhere. Bejanke and I watched for several minutes while a White-eared Honeyeater bathed in a puddle, harassed by a group of New Hollands who had finished their bath and were drying off in the sun.

We heard a very strange bird cry coming from some trees behind a dense stand of prickly wattle and stalked the perpetrator for some time. The call was unlike any we had heard before and started off with a series of clicks, almost like a giant Common Froglet, and ending in a metallic whirring noise, not unlike that of the Satin Bowerbird. Click-click, zzzz-zzzz-zzzz ...Click-click, zzzz-zzzz-zzzz ...Click-click, zzzz-zzzz-zzzz ... repeated often and with rising excitement. Bejanke saw what she thought was a White -naped Honeyeater, and we both saw a Restless Flycatcher, but the call doesn't mesh with our knowledge of these birds. Any other suggestions?

August Excursion
Great Ocean Road .

We will meet on Sunday, August 10 at 8.30 am at the Green Grub Garden Centre in the Waurnvale Shopping Centre, corner Princes Highway and Pioneer Road, Waurn Ponds. From there we will drive down the Ocean Road bushwalking, beachcombing and the like, depending on the weather. Please note earlier start time.

September Excursion
Yarto, Batesford.
Property owner, Mr. Bill Honey, has fenced several tracts of his land to exclude stock, kangaroos and rabbits, and the regeneration has been amazing. We will spend the morning as his guest, and then wander Belcher's Bush in the afternoon.

Meet at the Kardinia International College, Ballarat Road at 9.00 am. on Sunday September 7th.

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UNDARIA - ANOTHER THREAT TO OUR BAY

. . . Madeline Glynn

62 St. Albans Street, Whittington 3214.

Undaria pinnatifida is a golden-brown kelp native to the seas of Japan, where it is known as 'Wakame', and is extensively cultivated as a fresh and dried food. It has now spread to Australia and has recently been found in Port Phillip Bay, and has the potential to become a major pest in Victorian coastal waters.

Nicknamed the 'blackberry of the seas' due to its invasive nature it may become an extensive and serious weed that is difficult and expensive to control.

Undaria was discovered in Port Phillip Bay in July 1996, 2 kilometres off Point Wilson where it was probably introduced via ships visiting the Port of Geelong. It is already established in Tasmanian waters where it is believed to have been introduced during the 80's in ballast water, or in the hulls of wood-chip ships. This species has also been introduced to New Zealand.

Undaria grows between one and two metres tall and is found in marine waters from the low-tide mark down to fifteen metres. The golden-brown mature plant has a distinctive, spiralled, spore-producing structure (sporophyll) at its base.

It has a complicated life cycle, including two main stages -
1. Mature seaweed stage releases spores which settle on hard surfaces.
2. Microscopic stage spores transform into male and female cells which reproduce to form new plants.

Undaria is an annual which dies back each year as water temperatures rise, so it is not noticeable from about December through to May/June. Only the reproductive sporophy and root-like hold-fast, persist after the plant degenerates in summer. Mature plants can release up to 100 million spores between June and December, and in the microscopic stage can persist for several years before being fertilised. The plant also spreads when mature plants break free following storms and drift along the sea bed.

Undaria can colonise all hard bottom surfaces, competes with and displaces local species by shading and whipping smaller understorey plants. It also colonises seagrass blades, ropes, ship hulls and pier pylons. It thrives in disturbed habitats and the long term effects on the marine environment is unknown.

Any future sightings of Undaria within Port Phillip Bay need to be reported to Geelong Fisheries and Wildlife officers on 03 5226 4667.

Information for this article was supplied by the Department of Natural Resources and Environment.

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Contributors please note . . .

The committee has requested that the addresses of contributors of all 'magazine-type' articles be published to facilitate direct contact by interested parties.

This will not apply to other material.

If you do not wish your address to be published, kindly advise the editor.

JULY MEETING REPORT
. . . Vernon Cohen

A large number of members and visitors attended the meeting addressed by David Cameron on "Victorian Rainforests". David is a Senior Botanist with the Flora Branch of DNRE at the Arthur Rylah Institute and has written a number of papers concerning the ecology and flora of East Gippsland. As a member of the Rainforest Project Team of the Flora Branch, he prepared a substantial document which was the basis of his talk to us. It is published along with a number of other important papers presented to the Victorian Rainforest Symposium held at the State Museum of Victoria on 17th November, 1991. The publication may be obtained from the Monash Publications in Geography, Number 41, for $25.00 + postage. It is edited by Peter Gell & David Mercer. (We now have it in our Club library.)

David outlined the importance of rainforests , particularly referring to those of Victoria, which though relatively small in area and scattered over our State, are of immense scientific and historical significance to science. They are incredibly important museums of the past containing living fossils from which modern floral groups have evolved. Temperate rainforest has been in Australia, primarily in the southeast, for in excess of 80 million years and no doubt explains the evidence of ancient Gondwanic elements in these forests.

He described three main types of rainforest:
1. **Warm Temperate:** mainly in East Gippsland.
2. **Dry Rainforest:** also in East Gippsland in low rainfall areas with very little soil and often on northern slopes.
3. **Cool Temperate:** Beech Forest and/or Sassafras - create their own fire protection.

Rainforest is distinguished by a number of ecological, floristic and structural attributes. Ecologically they are fire sensitive, comprise closed, broadleaved forest vegetation with a continuous tree canopy of variable height, and with a characteristic diversity of species and life forms. Emergent eucalypts, acacias and occasionally other species may appear especially on margins or in gaps. An accurate definition of rainforest has been the subject of much discussion and study, to eliminate any obvious ambiguities in its practical applications.

Some of the distinguishing features of Victorian Rainforest types are listed from information tabled by David Cameron:

WARM TEMPERATE RAINFOREST:
Trees - usually two strata - low to moderate diversity: usually 3-6 canopy species - canopy fairly even or more commonly uneven and then usually heavily entangled with woody vines - emergent eucalypts & acacias often present - leaf size medium - simple leaves with **entire** margins most common - palms rare.
Vines - robust wood lianes, usually very conspicuous.
Treeferns & Ground ferns - usually abundant and conspicuous.
Habitat - rainfall moderate to high (800-1200mm) - may be lower when compensated by maritime influences - elevation 0-800m asl .
Note - the commonest canopy trees are the myrtaceous species Lilly Pilly (*Acmena smithii*) and/or Kanooka or Water Gum (*Tristaniopsis laurina*). - the commonest emergent is Blackwood (*Acacia melanoxylin*).
Major occurrences - Wilsons Promontary - East Gippsland (Lakes Entrance to Snowy River).

DRY RAINFOREST:
Trees - usually only one stratum - low to moderate diversity - canopy fairly even and continuous, sometimes interrupted by semi-emergent *Brachychiton* - emergent eucalypts and acacias absent or rare - leaf size medium - simple leaves with **entire** margins most common - palms absent.
Vines - woody,wiry and cane-like vines and herbaceous climbers common or abundant and usually conspicuous.
Treeferns - absent. **Ground ferns** - usually uncommon and inconspicuous, except for several drought-tolerant species.
Special feature - spiny or prickly shrubs sometimes present.
Habitat - low to moderate rainfall (700-900mm) - lowland to foothill elevations: 80-400 m asl.
Note - the commonest and often only dominant canopy tree is Sweet Pittosporum (*Pittosporum undulatum)* - the only significant emergents are scattered Kurrajong (*Brachychiton populneus*) & rarely Lightwood (*Acacia implexa*) and/or Blackwood (*Acacia melanoxylon*).
Major occurrences: Mitchell River Gorge, Murrindal River valley and Snowy River Gorge.

COOL TEMPERATE RAINFOREST:
Trees - one or two strata - canopy usually even and uniform - emergent eucalypts or sometimes acacias - leaf size small - simple leaves with **toothed** margins - palms absent.
Vines - slender woody or cane-like climbers uncommon and inconspicuous.
Treeferns - often very common. **Ground ferns** - usually abundant.
Habitat - high to very high rainfall (1000-2000 mm) - sea level to subalpine elevations: 70-1500 m asl. - mist and fog common at high elevations.
Note - the commonest and sometimes only dominant trees are Myrtle Beech (*Nothofagus cunninghamii*) and/or Sassafras (*Atherosperma moschatum*) - the commonest emergents are *Eucalyptus regnans* and *E. denticulata* (Errinundra Shining Gum)
Major occurrences: Otway Ranges, Central Highlands, Strzelecki Ranges and Errinundra Plateau.

There is not space to record the Epiphytes, Ferns and Vines that David spoke about or to explain the slides which showed forest landscapes and geological features. He also showed slides of many species of flowers which he explained in great detail. The recording tape ran out after 90 mins. leaving Cool Temperate Rainforest and Myrtle Wilt unrecorded !

(Continued on next page)

Further notes by Vernon Cohen

MYRTLE WILT caused by *Chalara australis* occurs throughout the range of *Nothofagus cunninghamii* in Tasmania, the Otway Ranges and more recently in the Strzelecki Ranges and Central Highlands. ***Chalara australis*** is a primary pathogen, and tree death occurs from 6 months to 3 years after infection. Leaves are retained on the tree giving a characteristic orange/brown appearance. Disease entry appears to be through wounds and following infection the trees become attractive to the mountain pinhole borer (*Platypus subgranosus*), which is a useful early indicator of the disease.

FURTHER READING;

Monash Publications in Geography Number 41. (In our library).

Rain Forest Trees of Eastern Victoria - Alec Floyd..

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CONSERVATION NOTES

. . . Valda Dedman

Again we have had to work hard at presenting our case for the Belmont Common. This has included meetings with members of parliament and a presentation for VCE students of Geelong Grammar and Geelong College, when three members of the Task Force spoke at length regarding the watersports complex. We are also seeking help from environmental organisations outside Geelong and continue to meet with members of the golf club, the GEC and concerned citizens.

We have reservations about the term of our Jerringot lease, which the council will reinstate until the end of the year and will meet with the responsible council officer to discuss the matter.

We have also met with Barwon Water about the loss of valuable Yellow Gums at the proposed Bannockburn sewerage facility.

We spoke with Belmont High School VCE students about the impact of the proposed ANCO development on the adjoining river environment. Whilst discussing how best to protect the area, one of the students suggested a *Friends of The Barwon River* . This idea warrants further investigation. Perhaps several sub-groups could be responsible for the river within the City of Greater Geelong, from Buckleys Falls to the ocean.

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BIRD OBSERVATION REPORTS July 1997

-- compiled by Barry Lingham.

Observations were submitted by Polly Cutcliffe (PCu), Ray Baverstock (RBa), Bob Preston (RP), Craig Morley (CMo), Kevin Ryan (KRy), Barry Lingham (BL), Ron Mole (RMo), Rachel Keary (RK), Penny Smith (PS), Joe Hubbard (JH), Grant Baverstock (GBa), Rohan Bugg (RBu), Rob McKenzie (RMc), Ira Savage (IS), Jocelyn Calvert (JCa), John Bottomley (JB), Marilyn Hewish (MHe), Ken Best (KB), Vern and Joan Cohen (JC/VC), Margaret Cameron (MAC), Jess Collins (JCo)

Yellow-nosed Albatross	1	16/07/97	Point Lonsdale lighthouse	GBa
Australian Gannet	many	16/07/97	Point Lonsdale lighthouse	GBa
Black-faced Shag	1	16/07/97	Point Lonsdale lighthouse	GBa
Little Black Cormorant	500	27/06/97	Drysdale, Lake Lorne	PCu
Darter	2	14/07/97	Werribee, Bungey's Hole	RBu
	1	14/07/97	Werribee River, Maltby Bypass	RBu
Black Swan	1	5/07/97	Cressy to Camperdown Road. Partial albino	GBa
Black Duck	2	6/07/97	Botanic Gardens - Eastern Park	CMo
Black-shouldered Kite	1	17/07/97	Balyang Sanctuary	RMo
	1	22/07/97	Barwon River, Breakwater Road	RMo
Little Eagle	1	7/07/97	Queen's Park	RBa
Grey (White) Goshawk	1	24/06/97	Newtown	KRy
	1	9/07/97	Newtown	KRy
Collared Sparrowhawk	1	20/07/97	Long Forest Reserve	RBu
Australian Hobby	1	9/07/97	8 Km north of Lethbridge on Ballarat Road	CMo
Brown Quail	3	14/07/97	Point Richards Reserve	RMc
Pied Oystercatcher	1	16/07/97	Point Lonsdale lighthouse	GBa
Masked lapwing	5	5/07/97	Highton. Helena Street.	RBa
	2	July	Belmont. Oberon Drive. Possibly nesting on flat roofed house	RP
Banded Lapwing	1	20/07/97	Drysdale Road. Between Moolap and Leopold	BL
	1	5/07/97	Shelford	GBa
	8	1/06/97	Little River Township.	GBa/LC
	2	8/06/97	Inverleigh to Winchelsea Road	GBa
	2	6/07/97	South Balliang. In new crop.	RBa
Double-banded Plover	67	29/06/97	Moolap Saltworks	CMo
Red-capped Plover	2	20/07/97	Lake Merrimu	RBu
Yellow-tailed Black-Cockatoo	50+	10/06/97	Herne Hill. Flying from South to North at 11:00am	IS
	50+	11/07/97	Herne Hill. Flying from South to North at 11:45am	IS
	8	13/07/97	Herne Hill. Flying from South to north at 1:30 pm.	IS
	4	25/06/97	Newtown. (afternoon)	RBa
	80+	27/06/97	St Leonards.	PCu

(Continued overleaf)

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Yellow-tailed Black-Cockatoo	11	28/06/97	West Geelong (Minerva Road). Flying South	JCa/JB
	165	29/06/97	Point Edwards carpark. Flying from SW .	JCa/JB
	7	5/07/97	Highton. Flying to the SW at 7:30 am.	RMo
	60	19/07/97	Ocean Grove Nat. Reserve. Flying NNE at 2:30 pm.	BL
	8	19/07/97	Ocean Grove Nat. Reserve. Flying south at 4:00 pm.	BL
	2	19/07/97	Ocean Grove Nat. Reserve. Flying east at 4:15 pm.	BL
Gang-gang Cockatoo	4	8/06/97	Forrest. West Barwon Dam.	Gba
Galah	2	13/07/97	Iron Bark Basin. Displaying at nest hollow.	CMo
Eastern Rosella	2	17/04/97	You Yangs	KB
Red-rumped Parrot	12+	12/07/97	Inverleigh. Feeding in River Red Gums.	GBa/RBa
	50+	25/06/97	Queen's Park Golf Course. On fairways.	RBa
	12	2/07/97	Queen's Park. Feeding on sauda	RMo
	10 to 50	winter	Barwon River, Queen's Park to Fyansford	IS
	35	27/06/97	Herne Hill. Very large numbers.	IS
Fan-tailed Cuckoo	1	14/07/97	Cobbledick's Ford Reserve.	RBu
Horsfield's Bronze-Cuckoo	1	29/06/97	Moolap Saltworks	MHe
	2	29/06/97	Moolap Saltworks	PCu
Laughing Kookaburra	1	10/07/97	Little River Township.	RBu
	2+	25/06/97	Buckley's Falls. Others seen at Queen's Park on 2/7/97	RBa
Bassian Thrush	1	3/07/97	Botanic Gardens - Eastern Park	CMo
	1	8/06/97	Forrest. West Barwon Dam.	GBa
Song Thrush	1	6/07/97	Newtown. Noble Street.	CMo
Flame Robin	2	20/07/97	Lake Merrimu	RBu
Pink Robin	1 (imm)	9/09/97	Botanic Gardens - Eastern Park	RP
	1(imm)	21/07/97	Botanic Gardens - Eastern Park	RP
	1(eclipse)	21/06/97	Botanic Gardens - Eastern Park	GBa
Eastern Yellow robin	2	18/07/97	Bannockburn Bush. Feeding on ground after perching.	RBa
Golden Whistler	1(imm)	29/06/97	East Geelong. Connor Street.	JCa
Olive Whistler	1	8/07/97	Apollo Bay. Paradise Scenic Reserve	GBa
Grey Shrike Thrush	1	27/06/97	Queen's Park. Upstream of Bridge.	KRy
Superb Fairy-wren	10	1/07/97	Queen's Park. Two "blue" males leading two groups.	KRy
White-browed Scrubwren	1	16/07/97	Queen's Park Golf Course. Beside walking track.	RBa
Speckled Warbler	2	20/07/97	Long Forest Reserve	RBu
Striated Thornbill	5	1/06/97	Eastern Park. Feeding with other small birds.	CMo
Yellow Thornbill.	10+	1/07/97	Highton. Helena Street. Feeding in Leucoxolyn rosea.	RBa
Brown Thornbill	2	30/06/97	Highton.	PS
Red-browed Treecreeper	1	9/07/97	Wombat State Forest. Spargo Creek.	GBa
Spiny-cheeked Honeyeater	1	9/07/97	Laverton Lake Reserve	RBu
Singing Honeyeater	3	11/07/97	Point Danger (Torquay). In bushes and washing in a puddle.	KB
White-naped Honeyeater	30	29/06/97	Newtown. Flying NNW at 11:15 am. with 5 Yellow-faced HE	CMo
	20+	3/07/97	Cobbledick's Ford Reserve. First record here.	RBu
	1	6/07/97	Bacchus Marsh. Not seen here for 18 years.	MHe
	10+	9/07/97	Laverton Lake Reserve. Uncommon in Laverton.	RBu
	1	14/07/97	Werribee. Bungey's Hole. Uncommon in Werribee	RBu
	10+	16/797	Werribee Park. First record for this site.	RBu
New Holland Honeyeater	12+	12/06/97	Bell Post Hill. Noisy flock seen on several days.	KB
	20+	3/07/97	Highton. Helena Street. Noisy flocks seen often.	RBa
	1	14/07/97	Cobbledick's Ford Reserve. First record here.	RBu
	2+	20/07/97	Lara. Nesting in Corea reflexa. Early breeding record.	VC/JC
Eastern Spinebill	1	1/06/97	Brisbane Ranges.	KB
Mistletoebird	20	27/06/97	Edwards Point Reserve. Feeding on Needle-leaf Mistletoe	PCu
Spotted Pardalote	1	21/06/97	Bell Post Hill. Feeding in gum tree and fluttering at window	KB
	1	13/06/97	Bell Post Hill. Eating insects from spiderwebs on house wall.	KB
Silvereye	2	14/07/97	Belmont. Oberon Drive.	RP
	30+	July	Highton. Eating persimmons	RMo
European Goldfinch	30	29/06/97	Moolap Saltworks. Feeding amongst Sarcocornia.	MHe
	3	6/07/97	Newtown. Usually not seen in winter	CMo
European Greeenfinch	3	5/07/97	Newtown. Feeding on nature strip. Usually absent in winter.	CMo
Red-browed Finch	30+	26/07/97	Newtown escarpment. Feeding with 30+ goldfinch.	KRy
Diamond firetail	2	20/07/97	Lake Merrimu	RBu
White-winged Chough	30+	20/07/97	Bannockburn Bush.	MAC
	50 to 60	2/07/97	You Yangs.	JHu
	12	6/07/97	Yellow Gum woodland at Bannockburn.	RMo
	40	14/07/97	Bannockburn Bush	JHu
	6+	18/07/97	Bannockburn Bush	RBa
	20+	winter	Anakie. DeMotts Road. Often seen	JCa/JB
Australian Magpie	2	late June	Newtown. Territorial disputes noted.	CMo
Pied Currawong	20+	22/07/97	Herne Hill. Elderslie Reserve.	JCo
	1	20/07/97	Newtown. Calling at 4:30 pm.	CMo

□

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Geelong Bird Report — Marilyn Hewish (Pri) 03 5367 3196 (Bus) 03 9344 5715

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